



U.S. Coast Guard **Lessons Learned**



Marine Safety, Security and Environmental Protection

FOSS 248-P2 OIL SPILL

Background

On December 30, 2003, on an unusually cold morning (20 degrees), at the Chevron-Point Wells Facility in Seattle, Washington the tank barge FOSS 248-P2 was taking on bunker fuel (Fuel Oil #6). At approximately 12:05 a.m., a tank was overfilled resulting in approximately 110 bbl (4,620 gallons) spilling into the waters of Puget Sound. Most of the oil initially moved south along the shoreline for a distance of about 5 nautical miles with no beach impacts except in the immediate vicinity of the facility. Oil then moved to the northwest until it beached in Port Madison, between Point Jefferson and Indianola, at about 1:30 p.m. Approximately 1.5 miles of beach and a salt-water marsh were subsequently oiled. There were several complications noted that hindered the effectiveness of the clean-up operation, including inability to deploy response boats for initial containment booming, inadequate skimming operations, improper management of assets, lack of trained beach cleaners, numerous staffing issues, etc. All removal activities were completed and the final multi-agency signoff occurred on April 29, 2004.

Lesson Learned

While there were several factors that contributed to the cause of the spill and the delayed response, the investigating officer determined that the impact of the oil spill could have been reduced if boom had been pre-deployed around the vessel. The pre-deployment of containment boom around a vessel involved in the transfer of certain types of fuels and cargoes can be an effective practice for mitigating the damaging effects of a spill should one occur. By preventing the spill from spreading, it protects the surrounding marine environment, while at the same time making recovery and clean-up of the spill easier and less costly.

Currently, the regulations in Title 33 Code of Federal Regulations Part 154.545 (d) give the Coast Guard Captain of the Port (COTP) the authority to require booming if the following conditions exist:

- (1) The environmental sensitivity of the area requires the added protection;
- (2) The products transferred at the facility pose a significant threat to the environment;
- (3) The past record of discharges at the facility is poor; or
- (4) The size or complexity of the transfer operation poses a significant potential for a discharge of oil or hazardous material; and
- (5) The use of vessel containment provides the only practical means to reduce the extent of environmental damage.



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While the COTP authority for the pre-booming is expected to be invoked infrequently and is not intended to be applied over an extensive area within a port or along a coast, pre-booming can be a valuable tool in mitigating the environmental effects of an oil spill.

Of course, there are many variables that must be considered to assure safe and effective pre-transfer booming to protect the marine environment. The following guidelines are offered for consideration if a government agency requires pre-booming or a facility voluntarily decides to pre-deploy boom prior to transfer:

- (1) Ensure the cargo being transferred is compatible (low flammability/volatility) with safe booming practices;
- (2) Assess vessel mooring and configuration relative to the facility and waterway;
- (3) Ensure containment equipment is in good serviceable condition and of sufficient quantity (length, connections, anchors, chains, lines, etc.) to meet the intent;
- (4) Ensure environmental conditions (sea state, current, wind, ice, temperature, visibility, etc.) are acceptable to conduct a safe and effective booming operation;
- (5) Ensure proper deployment strategy (diversion, exclusion, containment, etc.) and recovery techniques (area specific) are used to increase effectiveness; and
- (6) Assess vessel traffic (commercial and recreational) in the immediate area and the direct impact booming operations will have on vessels transiting the navigable channel/waterway (prevent channel blockage, vessel damage caused by equipment debris, etc.).

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